ABSTRACT OF THE DISCLOSURE

In an annealing process in which laser light is irradiated to a semiconductor thin film, a refractive index of the semiconductor thin film after laser light irradiation is measured and conditions for the next laser light irradiation are adjusted based on the measured refractive index value. For example, laser light irradiation conditions are adjusted so that semiconductor thin films always have the same refractive index. As a result, the annealing can be performed under the same conditions at every laser light irradiation even if the laser light irradiation conditions vary unavoidably.